

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of claims**

1-15. (Cancelled)

16. (New) A method for treating undesirable cell proliferation associated with mycoplasma infection in a subject comprising administering to the subject an effective amount of an agent that prevents or inhibits sialic acid-mediated attachment of mycoplasma to cells of the subject.

17. (New) The method of claim 16, wherein the agent exhibits an activity selected from the group consisting of neuraminidase activity, trans-sialidase activity, and a combination thereof.

18. (New) The method of claim 17, wherein the agent is an enzyme having trans-sialidase activity.

19. (New) The method of claim 18, wherein the enzyme is obtained from *Trypanosoma cruzi*.

20. (New) The method of claim 19, wherein the enzyme has an amino acid sequence set forth in SEQ ID NO:2.

21. (New) The method of claim 16, wherein the undesirable cell proliferation is a manifestation of a disease selected from the group consisting of atherosclerosis, ovarian carcinoma, breast cancer, prostate cancer, colon cancer, lung cancer, pancreatic cancer, gastric cancer, thyroid cancer, melanoma, Hodgkin's lymphoma, non-Hodgkin's lymphoma and testicular carcinoma.